

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
18 December 2003 (18.12.2003)

PCT

(10) International Publication Number
WO 2003/104848 A3

(51) International Patent Classification⁷: G01N 23/00, H01J 37/256

(21) International Application Number: PCT/IL2003/000457

(22) International Filing Date: 1 June 2003 (01.06.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:

150054	5 June 2002 (05.06.2002)	IL
150055	5 June 2002 (05.06.2002)	IL
60/393,747	8 July 2002 (08.07.2002)	US
60/448,808	20 February 2003 (20.02.2003)	US

(71) Applicant (for all designated States except US): QUANTOMIX LTD. [IL/IL]; P.O. Box 4037, 70400 Nes Ziona (IL).

(72) Inventors; and

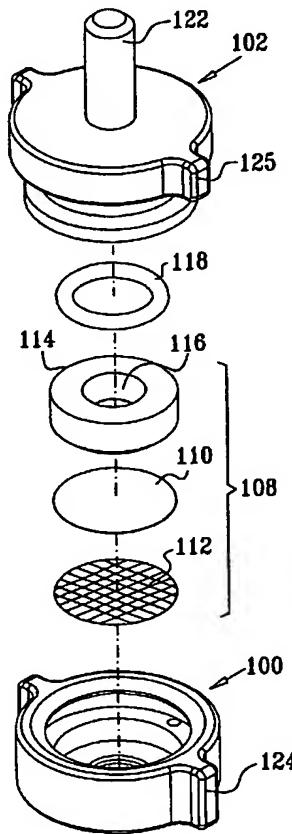
(75) Inventors/Applicants (for US only): BEHAR, Vered [IL/IL]; 202, 90815 Beit Zayit (IL). NECHUSHTAN, Amotz [IL/IL]; 32 Haalon Street, 76858 Aseret (IL). KLIGER, Yossef [IL/IL]; 17 Mivza Nachshon Street, 74554 Rishon Le'Zion (IL). GILEADI, Opher [IL/IL]; 4 Paldi Street, 76248 Rehovot (IL).

(74) Agents: SANFORD T. COLB & CO. et al.; P.O. Box 2273, 76122 Rehovot (IL).

(81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

[Continued on next page]

(54) Title: METHODS FOR SEM INSPECTION OF FLUID CONTAINING SAMPLES



(57) Abstract: A method of visualizing a sample in a wet environment including introducing a sample into a specimen enclosure in a wet environment and scanning the sample in the specimen enclosure in a scanning electron microscope, thereby visualizing the sample.

WO 2003/104848 A3



(84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

— before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

(88) Date of publication of the international search report: 26 February 2004

Published:
— with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/IL03/00457

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : G01N 23/00, H01J37/256
US CL : 250/310, 250/397

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
U.S. : 250/310, 250/397, 250/251

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 4,720,633 A (NELSON) 19 January 1988 (19.01.1988), column 2, line 19 - column 5, line 19, and Fig. 1.	1-203
A	US 4,880,976 A (MANCUSO et al.) 14 November 1989 (14.11.1989), column 1, line 46 - column 4, line 14, and Fig 1.	1-203
A	US 5,412,211 A (KNOWLES) 02 May 1995 (02.05.1995), column 3, line 37 - column 12, line 2.	1-203
A	US 5,789,748 A (LIU et al.) 04 August 1998 (04.08.1998), column 2, line 29 - column 8, line 64.	1-203
A, P	US 6,459,482 B1 (SINGH et al.) 01 October 2002 (01.10.2002), column 2, line 49 - column 7, line 65.	1-203

Further documents are listed in the continuation of Box C.

See patent family annex.

* Special categories of cited documents:

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier application or patent published on or after the international filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

"T"

later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X"

document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y"

document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&"

document member of the same patent family

Date of the actual completion of the international search

16 September 2003 (16.09.2003)

Date of mailing of the international search report

23 DEC 2003

Name and mailing address of the ISA/US

Mail Stop PCT, Attn: ISA/US
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

Authorized officer

John Lee

John Lee

Telephone No. (703) 308-0956

Facsimile No. (703)305-3230